

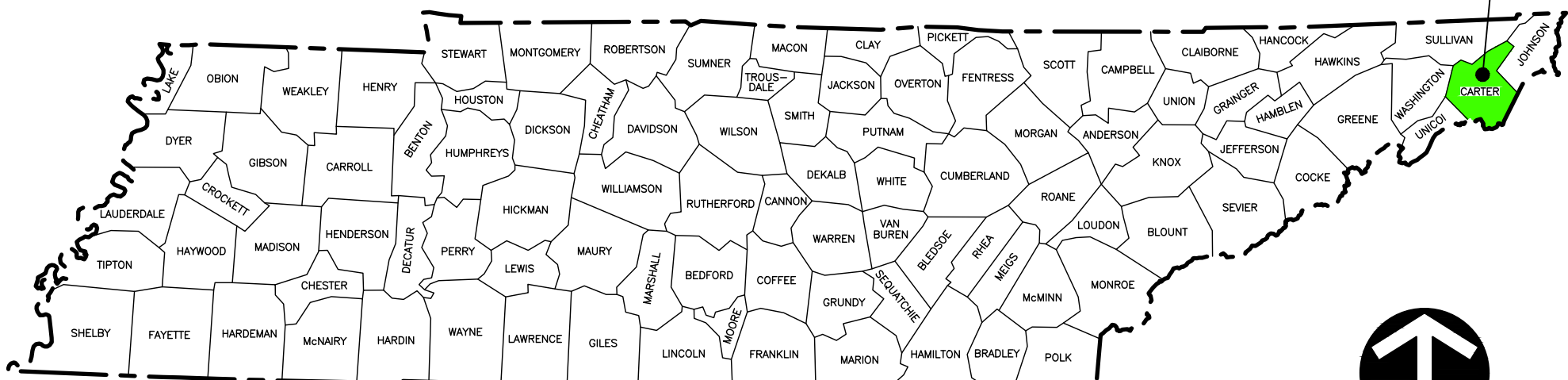
WATAUGA RIVER SLOPE STABILIZATION PLAN

CONSTRUCTION DRAWINGS

SYCAMORE SHOALS STATE PARK (FORMER NARC LANDFILL)
ELIZABETHTON, TENNESSEE

MARCH 2023

SITE LOCATION

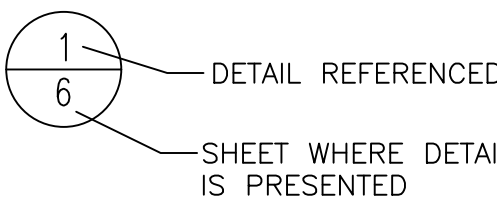


PROJECT LOCATION

Sheet List Table

Sheet Number	Sheet Title
C000	COVER
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STANDARD DETAIL CALLOUT



STANDARD REVISION CALLOUT

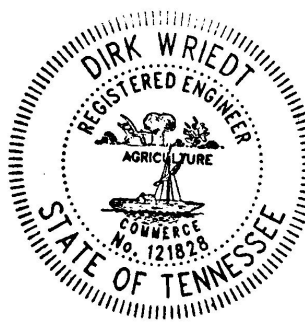


SITE

SITE LOCATION MAP
NOT TO SCALE

ISSUED FOR CONSTRUCTION

DATE: 03/01/23 BY: DW



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TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
BUREAU OF PARKS AND CONSERVATION & DIVISION OF REMEDIATION
NASHVILLE, TENNESSEE

DRAWN BY: CDS CHECKED BY: CEC APPROVED BY: DW
DATE: MARCH 2023 DWG SCALE: N/A PROJECT NO: 305-871

COVER

C000

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PURPOSE NOTE

THE PURPOSE OF THIS PROJECT IS TO (A) STABILIZE THE EASTERN SHORE OF THE WATAUGA RIVER IN THE VICINITY OF THE SYCAMORE SHOALS STATE PARK, AND (B) CREATE AN OBSERVATION AREA AS INDICATED ON THE DRAWINGS USING EXCAVATED MATERIAL DURING THIS PROJECT. IT IS IMPERATIVE THAT NO SEDIMENT ENTER THE WATAUGA RIVER DURING CONSTRUCTION ACTIVITIES.

GENERAL NOTES

1. ANY MODIFICATIONS TO THE WORK AS SHOWN ON THESE DRAWINGS MUST HAVE PRIOR WRITTEN APPROVAL BY THE OWNER'S REPRESENTATIVE AND ENGINEER.
2. ALL LAND-DISTURBING ACTIVITIES SHALL BE SUBJECT TO INSPECTION AND SITE INVESTIGATION BY THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION. FAILURE TO COMPLY WITH THESE REGULATIONS IS SUBJECT TO LEGAL ENFORCEMENT ACTION.
3. SITE IS TO BE CONSTRUCTED IN A MANNER THAT REDUCES DISRUPTION TO NEIGHBORING OPERATIONS TO MAXIMUM EXTENT POSSIBLE. TEMPORARY MEASURES REQUIRED TO FACILITATE DAILY OPERATIONS DURING THE CONSTRUCTION PERIOD SHALL BE IMPLEMENTED BY THE CONTRACTOR; UNDER NO CIRCUMSTANCES SHOULD IMPLEMENTATION OF THESE MEASURES JEOPARDIZE THE SAFETY OF NEIGHBORING EMPLOYEES OR THE CONTRACTOR.
4. ALL TRENCHING AND BACKFILLING SHALL BE IN ACCORDANCE WITH ALL FEDERAL OSHA REGULATIONS. CONTRACTOR TO PAY PARTICULAR ATTENTION TO 29 CFR PART 1926, SUBPARTS M AND P.
5. THE CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COMPLYING WITH APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE PERMITS AND PAY ALL REQUIRED FEES PRIOR TO BEGINNING WORK. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUBCONTRACTORS TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.
6. CONTRACTOR SHALL REFER TO PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION. IT IS NOT THE ENGINEER'S INTENT THAT ANY SINGLE PLAN SHEET IN THIS SET OF DOCUMENTS FULLY DEPICT ALL WORK ASSOCIATED WITH THE PROJECT.
7. BEFORE INSTALLATION OF UTILITIES, THE CONTRACTOR SHALL VERIFY ALL CROSSINGS, BY EXCAVATION WHERE NECESSARY, AND INFORM THE OWNER AND THE ENGINEER OF ANY CONFLICTS. THE ENGINEER WILL BE HELD HARMLESS IN THE EVENT HE IS NOT NOTIFIED OF DESIGN CONFLICTS PRIOR TO CONSTRUCTION.
8. A GEOTECHNICAL INVESTIGATION FOR THE ENTIRE PROJECT AREA WAS NOT CONDUCTED.

SURVEY NOTES

1. SURVEY NOTES ARE DETAILED ON OTHER PLAN SHEETS WITHIN THIS CONSTRUCTION SET.

LAYOUT NOTES

1. THE CONTRACTOR SHALL CHECK EXISTING GRADES, DIMENSIONS, AND INVERTS IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.
2. ALL DAMAGE TO EXISTING PAVEMENT TO REMAIN WHICH RESULTS FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED WITH LIKE MATERIALS AT THE CONTRACTOR'S EXPENSE.
3. CONTRACTOR SHALL MAINTAIN ONE SET OF AS-BUILT/RECORD DRAWINGS ON THE JOB SITE DURING CONSTRUCTION FOR DISTRIBUTION TO THE OWNER AND/OR OWNER'S REPRESENTATIVE UPON COMPLETION.

GRADING NOTES

1. EARTHWORK SHALL INCLUDE CLEARING AND GRUBBING, STRIPPING AND STOCKPILING TOPSOIL, MASS GRADING, EXCAVATION, FILLING, UNDERCUT AND REPLACEMENT, AND COMPACTION IF REQUIRED.
2. CONTRACTOR SHALL STRICTLY ADHERE TO THE CDA PLAN PREPARED FOR THIS PROJECT AND THE EROSION PREVENTION & SEDIMENT CONTROL (EPSC) MEASURES DETAILED IN THESE DRAWINGS.
3. EARTHWORK SHALL BE PERFORMED IN ACCORDANCE WITH TDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION SECTION 203.
4. EXCESS SOIL MATERIALS SHALL NOT BE PLACED OR STOCKPILED IN THE FLOODPLAIN.
5. CONTRACTOR TO REFILL UNDERCUT AREAS WITH SUITABLE MATERIAL AND COMPACT AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
6. ALL AREAS SHALL BE STABILIZED IN ACCORDANCE WITH THE EPSC PLANS AND/OR EPSC MEASURES DETAILED IN THESE DRAWINGS, UNLESS NOTED OTHERWISE.
7. ALL EXCESS SOIL MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE DESIGNATED AND SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF OFFSITE AT NO ADDITIONAL COST TO THE OWNER IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS.


UTILITY NOTES

1. THE CONTRACTOR IS PARTICULARLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF THE EXISTING UTILITIES SHOWN HEREON IS BASED ON TOPOGRAPHIC SURVEYS AND RECORD DRAWINGS. THE CONTRACTOR SHALL NOT RELY UPON THIS INFORMATION AS BEING EXACT OR COMPLETE. SHOULD UNCHARTED UTILITIES BE ENCOUNTERED DURING EXCAVATION OPERATIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON AS POSSIBLE FOR INSTRUCTIONS. THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION AND REQUEST FIELD VERIFICATION OF UTILITY LOCATIONS.
2. SHOULD THE CONTRACTOR UNEXPECTEDLY ENCOUNTER UNDERGROUND UTILITIES AT ANY TIME DURING CONSTRUCTION, THE OWNER'S REPRESENTATIVE AND ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
3. EXISTING UTILITIES LOCATED IN THE PROJECT LIMITS TO BE RELOCATED BY OTHERS. CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE FOR UTILITY RELOCATION.
4. INVESTIGATION, LOCATION, SUPPORT, PROTECTION, AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE SEQUENCING OF CONSTRUCTION FOR ALL UTILITY LINES SO THAT WATER LINES, GAS LINES, AND UNDERGROUND ELECTRIC AND COMMUNICATION LINES DO NOT CONFLICT WITH SANITARY SEWERS OR STORM SEWERS. CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE SO THAT UTILITIES ARE INSTALLED PRIOR TO PAVEMENT CONSTRUCTION.
6. ALL TRENCH SPOILS SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE DESIGNATED AND SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF OFFSITE AT NO ADDITIONAL COST TO THE OWNER IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS.


EROSION PREVENTION AND SEDIMENT CONTROL GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR ADHERING TO ALL EROSION PREVENTION AND SEDIMENT CONTROL PROVISIONS AS SET FORTH IN THE CONTRACT DOCUMENTS AND TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION "EROSION AND SEDIMENT CONTROL HANDBOOK", LATEST EDITION, WHERE CONFLICTS EXIST BETWEEN HANDBOOK AND DESIGN PLANS, THE MOST STRINGENT REQUIREMENT SHALL APPLY.
2. CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES AND CONSTRUCTION TRAFFIC TO INSIDE LIMITS OF DISTURBANCE AT ALL TIMES.
3. TEMPORARY STABILIZATION SHALL BE PROVIDED TO ALL DISTURBED AREAS WITHIN 14 DAYS OF CEASING LAND DISTURBANCE ACTIVITIES.
4. PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED (I.E. CLEARING AND GRUBBING INITIATED) MORE THAN 14 CALENDAR DAYS PRIOR TO GRADING OR EARTH MOVING ACTIVITIES UNLESS THE AREA IS SEEDED AND/OR MULCHED OR OTHER TEMPORARY COVER IS INSTALLED.
5. CLEARING, GRUBBING, AND OTHER DISTURBANCE TO RIPARIAN VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. UNNECESSARY VEGETATION REMOVAL IS PROHIBITED.
6. ALL DISTURBED AREAS SHALL BE PROPERLY STABILIZED AS SOON AS PRACTICABLE. PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL MEASURES OVER TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ON ALL PROJECTS. SURFACE ROUGHENING SHALL BE PERFORMED ON ALL DISTURBED RIPARIAN AREAS.
7. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED CONCURRENTLY WITH CLEARING OPERATIONS, AND SHALL BE FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS.
8. EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) INSPECTION, REPAIR, AND MAINTENANCE OF STRUCTURES IS TO BE PERFORMED ON A REGULAR BASIS AND SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT (50%). DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE CARE TO ENSURE THAT STRUCTURAL COMPONENTS OF EROSION PREVENTION AND SEDIMENT CONTROL STRUCTURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE STRUCTURES AT THE CONTRACTOR'S OWN EXPENSE.
9. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS.
10. SEEDING/MULCHING TO BE PERFORMED IN ACCORDANCE WITH THE TDOT STANDARDS SPECIFICATION FOR ROAD & BRIDGE CONSTRUCTION SECTION 801.
11. WOODEN STAKES USED TO ANCHOR THE ECM SHALL NOT EXTEND MORE THAN 1/2" ABOVE GRADE.
12. WATER PUMPED FROM WORK AREAS AND EXCAVATION MUST BE HELD IN SETTLING BASINS OR TREATED BY FILTRATION PRIOR TO ITS DISCHARGE INTO SURFACE WATERS. WATER MUST BE HELD IN SETTLING BASINS UNTIL AT LEAST AS CLEAR AS THE RECEIVING WATERS. SETTLING BASINS SHALL NOT BE LOCATED CLOSER THAN 20 FEET FROM THE TOP BANK OF A STREAM. SETTLING BASINS AND SEDIMENT TRAPS SHALL BE PROPERLY DESIGNED ACCORDING TO THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE OR WELL-VEGETATED OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT.
13. CHECK DAMS SHALL BE USED WHERE RUNOFF IS CONCENTRATED. CLEAN ROCK, BRUSH, GABION, OR SANDBAG CHECK DAMS SHALL BE PROPERLY CONSTRUCTED TO REDUCE WATER FLOW VELOCITY AND PROVIDE EROSION CONTROL.
14. INSPECTION OF EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE DONE ACCORDING TO THE TENNESSEE CONSTRUCTION GENERAL PERMIT.
15. UPON CONCLUSION OF THE INSPECTIONS, EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES FOUND TO BE INEFFECTIVE SHALL BE REPAIRED, REPLACED, OR MODIFIED BEFORE THE NEXT RAIN EVENT, IF POSSIBLE, BUT IN NO CASE MORE THAN 7 DAYS AFTER THE INSPECTION OR WHEN THE CONDITION IS IDENTIFIED. IF THE REPAIR, REPLACEMENT OR MODIFICATION IS NOT PRACTICAL WITHIN THE TIMEFRAME, WRITTEN DOCUMENTATION MUST BE PROVIDED IN THE FIELD BOOK AND AN ESTIMATED REPAIR, REPLACEMENT OR MODIFICATION SCHEDULE SHALL BE DOCUMENTED WITHIN 24 HOURS AFTER IDENTIFICATION.
16. THE OPERATION OF EQUIPMENT IN WATERS OF THE STATE/U.S. IS PROHIBITED, EXCEPT AS NEEDED TO PERFORM STREAM RESTORATION WORK AS DIRECTED BY THE ENGINEER.
17. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S.
18. THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND ORDINANCES, INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.
19. THE CONTRACTOR SHALL PROTECT ALL TREES TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.

REVISION RECORD		
NO	DATE	DESCRIPTION
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▲		
▲		
▲		



EIL
ENVIRONMENTAL
INFORMATION
LOGISTICS, LLC



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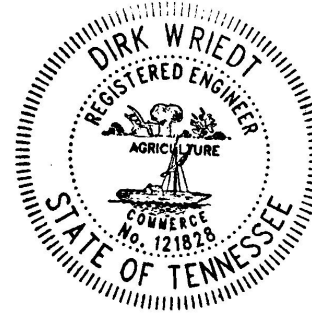
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DATE:	MARCH 2023	DWG SCALE:	N/A	PROJECT NO.:	305-871

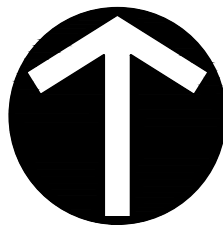
GENERAL NOTES

C001

ISSUED FOR CONSTRUCTION

DATE: 03/01/23 BY: DW





GENERAL NOTES:

- BEARINGS AND COORDINATES ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM (NAD83)(2011).
- BEARINGS AND DISTANCES FOR THE SUBJECT PROPERTY BOUNDARY ARE SHOWN HEREON PER THE CURRENT DEED OF RECORD FOUND IN DEED BOOK 237, PAGE 362.
- ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- CONTOURS ARE SHOWN AT 2 FOOT INTERVALS.
- GPS SURVEY DATA
(A) TYPE OF GPS SURVEY: RTK & OPUS
(B) POSITIONAL ACCURACY: 0.05 FEET
(C) COMPLETION DATE OF SURVEY: JANUARY 06, 2021
(D) DATUM/EPOCH: NAD83(2011) EPOCH 2010.00
(E) PUBLISHED/FIXED CONTROL USED: NGS PID'S DJ9532, DN7506, & DL2080
(F) GEOID MODEL: GEOID 18
(G) COMBINED GRID FACTOR: 0.99992241
- ALL DEED BOOK AND PLAT REFERENCES PERTAIN TO THE REGISTER'S OFFICE FOR CARTER COUNTY, TENNESSEE.
- PROPERTY LINES SHOWN WERE PLOTTED FROM INFORMATION TAKEN FROM EITHER DEED DESCRIPTION, PLATS, OR TAX MAPS.
- THIS DRAWING IS NOT INTENDED TO BE USED AS OR REPRESENT A GENERAL PROPERTY SURVEY AS DEFINED BY T.C.A. 0820-03-07.
- IT IS RECOMMENDED THAT TENNESSEE ONE-CALL SYSTEM, INC. BE NOTIFIED BEFORE ANY EXCAVATION IS CONDUCTED. PHONE: 1-800-351-1111.
- EXISTING CONTOURS AND TOPOGRAPHIC INFORMATION DERIVED FROM AN UNMANNED AERIAL LIDAR FLIGHT PERFORMED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. ON JANUARY 6, 2021. LIDAR DATA WAS SUPPLEMENTED WITH RIVER/RIVERBANK SURVEY SHOTS PERFORMED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. ON AUGUST 23-24, 2021.
- EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE GENERAL AND ILLUSTRATIVE IN NATURE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO CONSTRUCTION ON THIS PROJECT.
- AS SHOWN HEREON, A PORTION OF THE PROPERTY IS LOCATED IN A FLOOD HAZARD ZONE "AE" (AREAS DETERMINED TO BE INSIDE THE 1% ANNUAL CHANCE FLOODPLAIN) ACCORDING TO F.I.R.M. MAP "CARTER COUNTY, TENNESSEE" PANEL 160 OF 400, MAP NUMBER 47019C0160E, REVISED SEPTEMBER 26, 2008. FLOODWAY AND HAZARD ZONES WERE GEOLOCATED FROM F.I.R.M. MAP AND DO NOT NECESSARILY CORRELATE WITH CONTOURS SHOWN ON PLAN.
- EXISTING ABANDONED UNDERGROUND SEWER LINE (APPROX.) DERIVED FROM PDF "TOPOGRAPHIC OF LANDFILL" DWG. #86-28 CREATED BY TH&P, INC. SEPTEMBER 01, 1987.

REVISION RECORD		
NO	DATE	DESCRIPTION

Line Table		
Line #	Length	Direction
L1	88.94	S72°36'39"W
L2	31.71	S72°36'39"W
L3	72.65	S72°36'39"W
L4	59.58	N15°33'59"E
L5	80.13	S46°12'47"W
L6	41.65	N86°11'13"W
L7	31.62	N24°59'51"W
L8	20.97	N24°59'51"W
L9	65.61	N24°59'51"W
L10	131.06	N15°34'04"E
L11	639.70	S72°37'14"W
L12	49.85	S46°35'05"W
L13	61.98	S46°35'05"W
L19	95.32	N15°34'04"E
L20	577.57	S72°37'14"W
L21	114.87	S46°35'05"W
L14	43.11	N01°33'38"E
L15	36.27	N18°32'51"W
L16	537.67	S74°57'07"W
L17	98.98	S66°21'04"W
L18	58.82	S66°21'04"W
L22	50.41	N01°33'38"E
L23	56.66	S74°57'07"W

LEGEND:	
	EXISTING PROPERTY LINE
	EXISTING ADJACENT PROPERTY LINE
	EXISTING EASEMENT
	EXISTING RIGHT-OF-WAY
	EXISTING INDEX CONTOUR
	EXISTING INTERMEDIATE CONTOUR
	EDGE OF WATER (AS OF AUGUST 23-24, 2021)
	EXISTING OVERHEAD WIRE
	EXISTING FENCE
	EXISTING TREELINE
	IRON PIN FOUND
	AERIAL CONTROL POINT
	GPS STATION
	UTILITY POLE
	GUY WIRE



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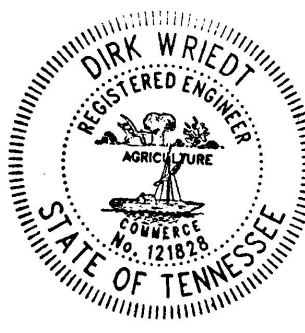
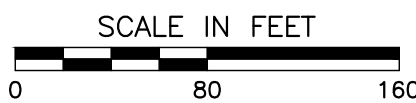
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DATE: MARCH 2023 DWG SCALE: 1"=80' PROJECT NO: 305-871

EXISTING CONDITIONS

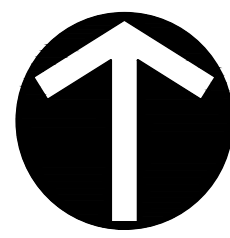
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NORTH

Line Table		
Line #	Length	Direction
L1	88.94	S72°36'39"W
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L22	50.41	N01°33'38"E
L23	56.66	S74°57'07"W

- LEGEND:**
- EXISTING PROPERTY LINE
 - EXISTING ADJACENT PROPERTY LINE
 - EXISTING EASEMENT
 - 1500----- EXISTING INDEX CONTOUR
 - EXISTING INTERMEDIATE CONTOUR
 - EDGE OF WATER (AS OF AUGUST 23-24, 2021)
 - OH-W EXISTING OVERHEAD WIRE
 - x-x-x EXISTING FENCE
 - EXISTING TREELINE
 - 1500----- PROPOSED TOPSOIL/STOCKPILE INDEX CONTOUR
 - 1500----- PROPOSED TOPSOIL/STOCKPILE INTERMEDIATE CONTOUR
 - 1500----- PROPOSED RIPRAP INDEX CONTOUR
 - 1500----- PROPOSED RIPRAP INTERMEDIATE CONTOUR
 - IRON PIN FOUND
 - ⊕ AERIAL CONTROL POINT
 - GPS STATION
 - ⊕ UTILITY POLE
 - GUY WIRE

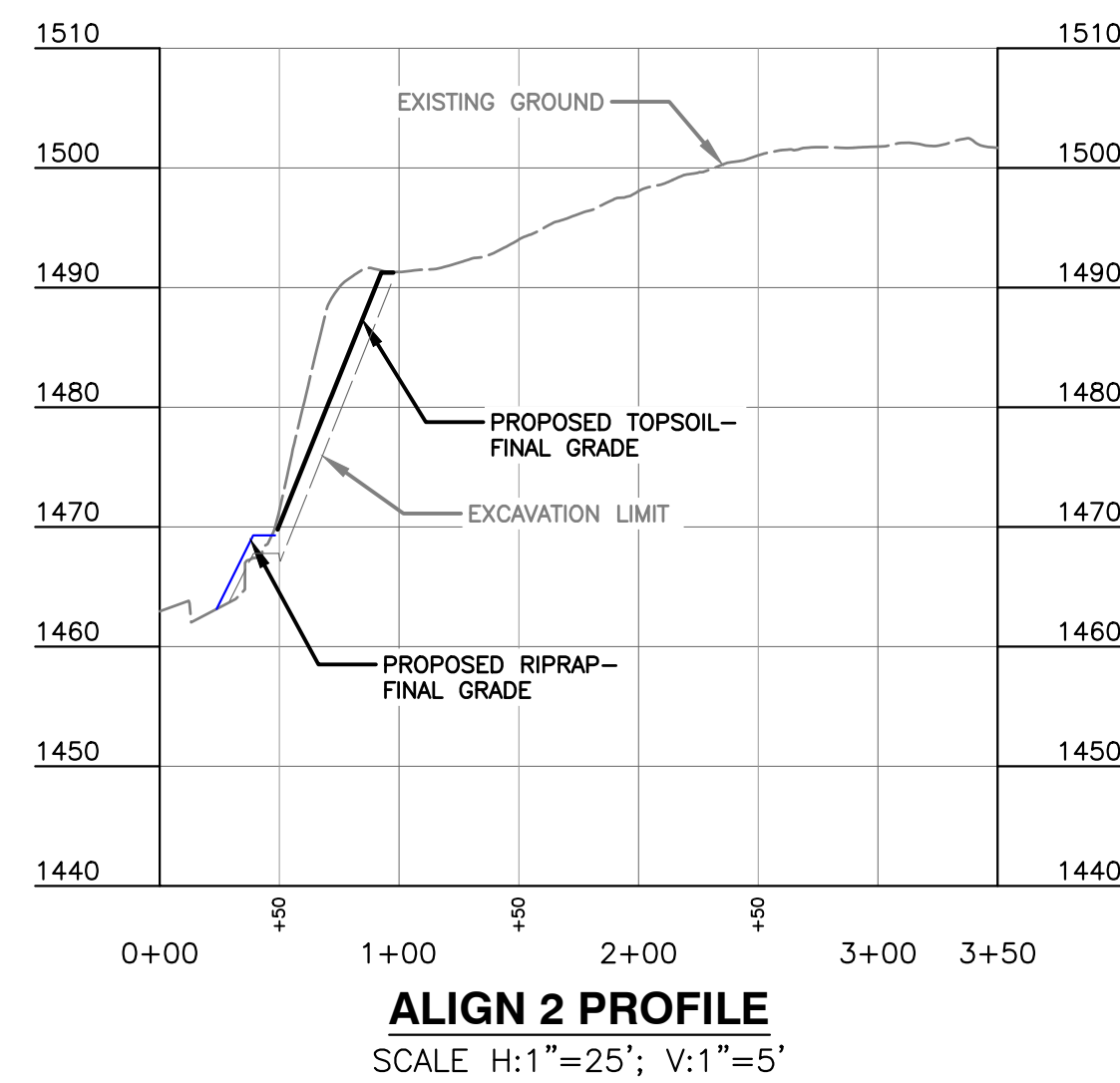
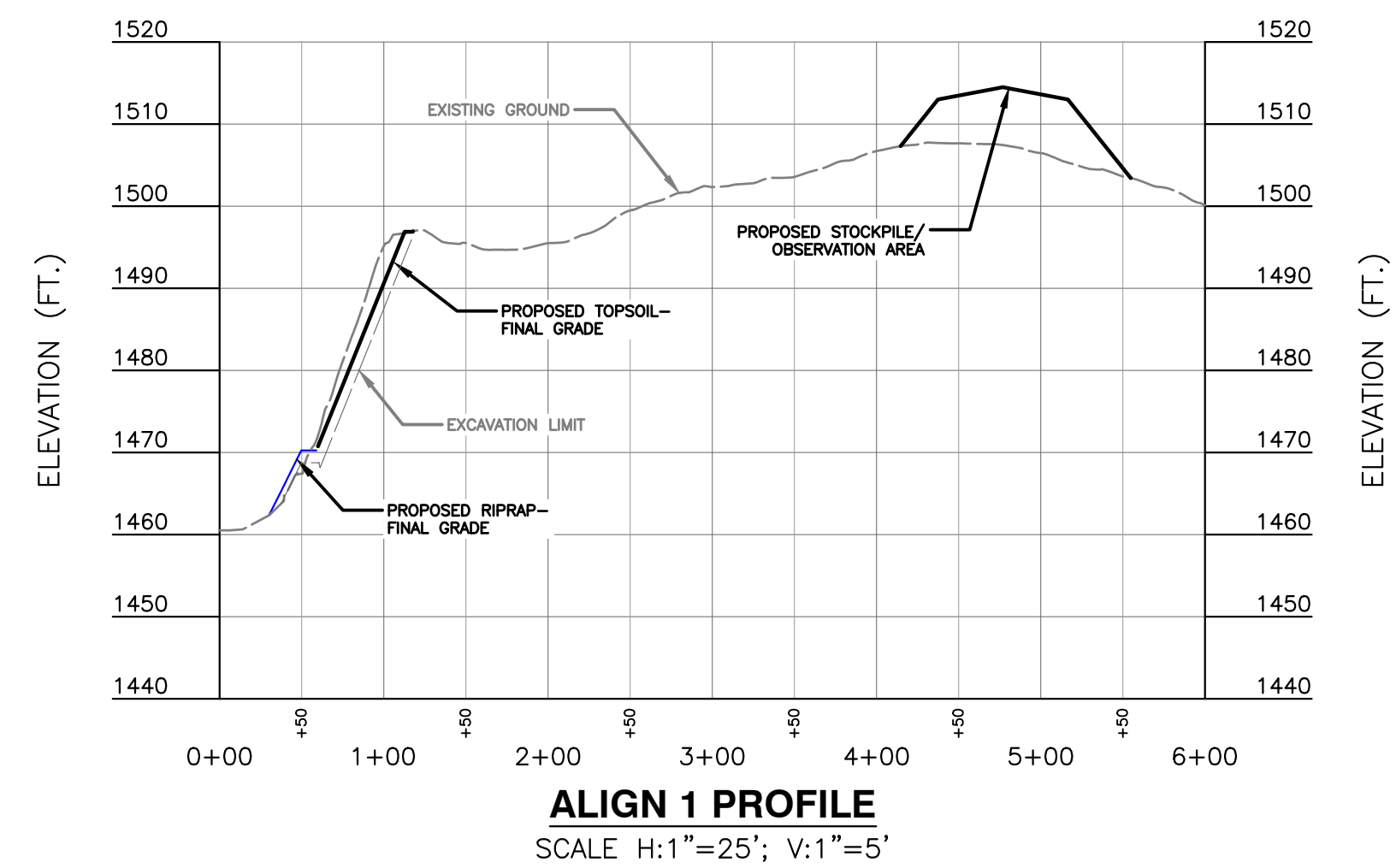
PROJECT LENGTH = 1,354 LF
FILL BELOW ORDINARY HIGH WATER (1470 FT +MSL) = 850 YDS³

PROPOSED TOPSOIL
FINAL GRADE
1 2 3
C600 C600 C600

PROPOSED STOCKPILE/OBSERVATION AREA
(CONTRACTOR TO EXCAVATE EXISTING
MATERIAL FROM BANK AND THEN
STOCKPILE HERE)

TRANSITION TO
EXISTING

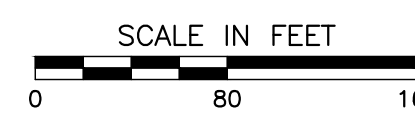
TRANSITION TO
EXISTING



REVISION RECORD		
NO	DATE	DESCRIPTION

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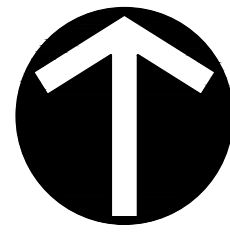
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PROPOSED GRADING

C300



- LEGEND:**
- EXISTING PROPERTY LINE
 - EXISTING ADJACENT PROPERTY LINE
 - EXISTING EASEMENT
 - EXISTING INDEX CONTOUR
 - EXISTING INTERMEDIATE CONTOUR
 - EDGE OF WATER (AS OF AUGUST 23-24, 2021)
 - EXISTING OVERHEAD WIRE
 - EXISTING FENCE
 - EXISTING TREELINE
 - PROPOSED TOPSOIL/STOCKPILE INDEX CONTOUR
 - PROPOSED TOPSOIL/STOCKPILE INTERMEDIATE CONTOUR
 - PROPOSED RIPRAP INDEX CONTOUR
 - PROPOSED RIPRAP INTERMEDIATE CONTOUR
 - PROPOSED EROSION CONTROL MAT
 - PROPOSED SILT FENCE
 - UTILITY POLE
 - GUY WIRE

PROPOSED SILT FENCE
(TO BE INSTALLED JUST UPSLOPE
OF RIPRAP BENCH IMMEDIATELY
AFTER PLACING RIPRAP)

PROPOSED EROSION CONTROL MAT
(TO BE INSTALLED ON FINISHED 2:1 SLOPE
IMMEDIATELY FOLLOWING PLACEMENT OF TOPSOIL)

PROPOSED SILT FENCE
(TO BE INSTALLED PRIOR TO STOCKPILING).
INSTALL SILT FENCE 15-20 FEET OUTSIDE
OF STOCKPILE AREA TO CREATE BUFFER.

ISSUED FOR CONSTRUCTION

DATE: 03/01/23 BY: DW

SCALE IN FEET
0 80 160



REVISION RECORD		
NO	DATE	DESCRIPTION



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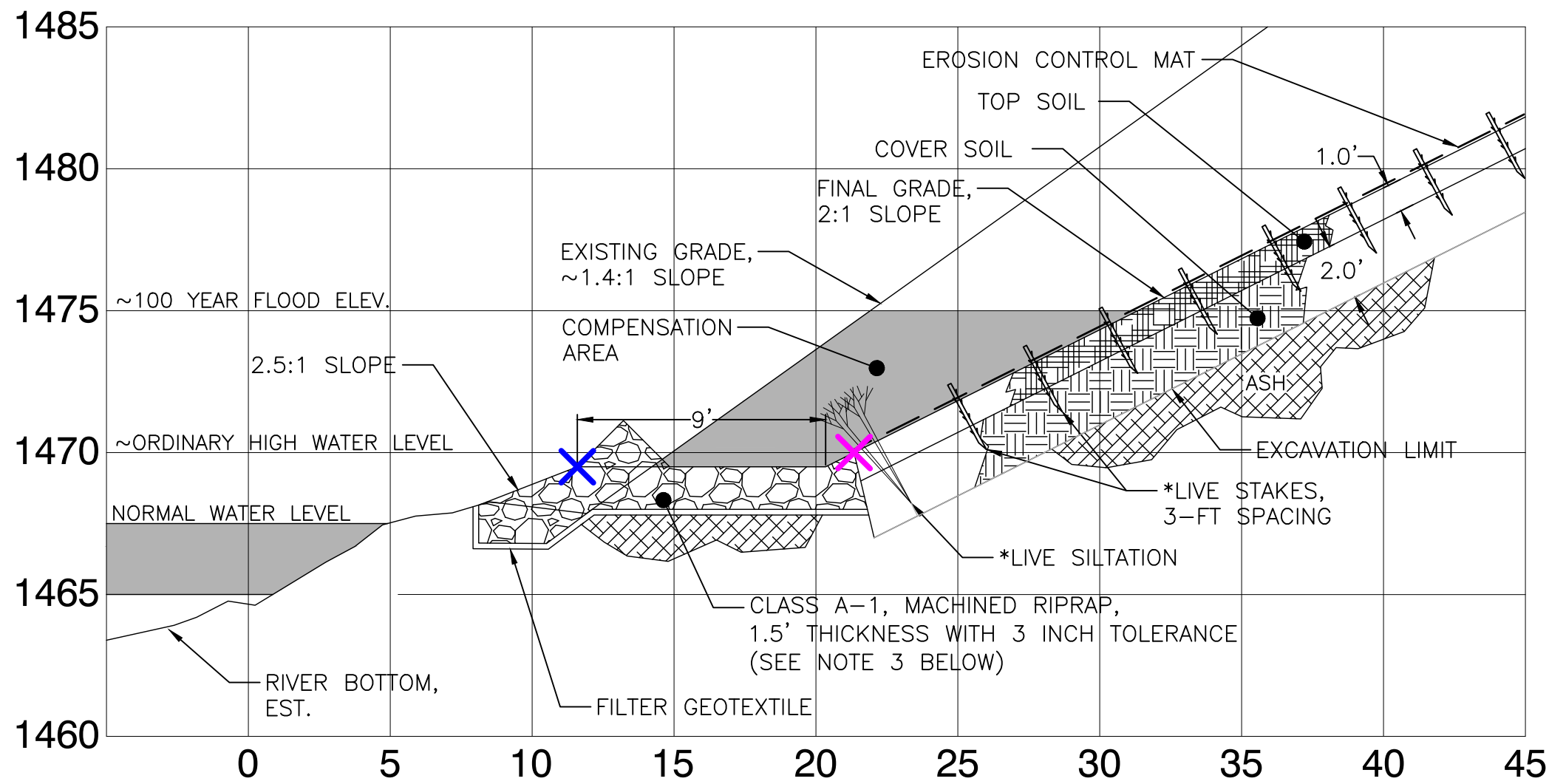
TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
BUREAU OF PARKS AND CONSERVATION & DIVISION OF REMEDIATION
NASHVILLE, TENNESSEE

DRAWN BY: CDS CHECKED BY: CEC APPROVED BY: DW
DATE: MARCH 2023 DWG SCALE: 1"=80' PROJECT NO: 305-871

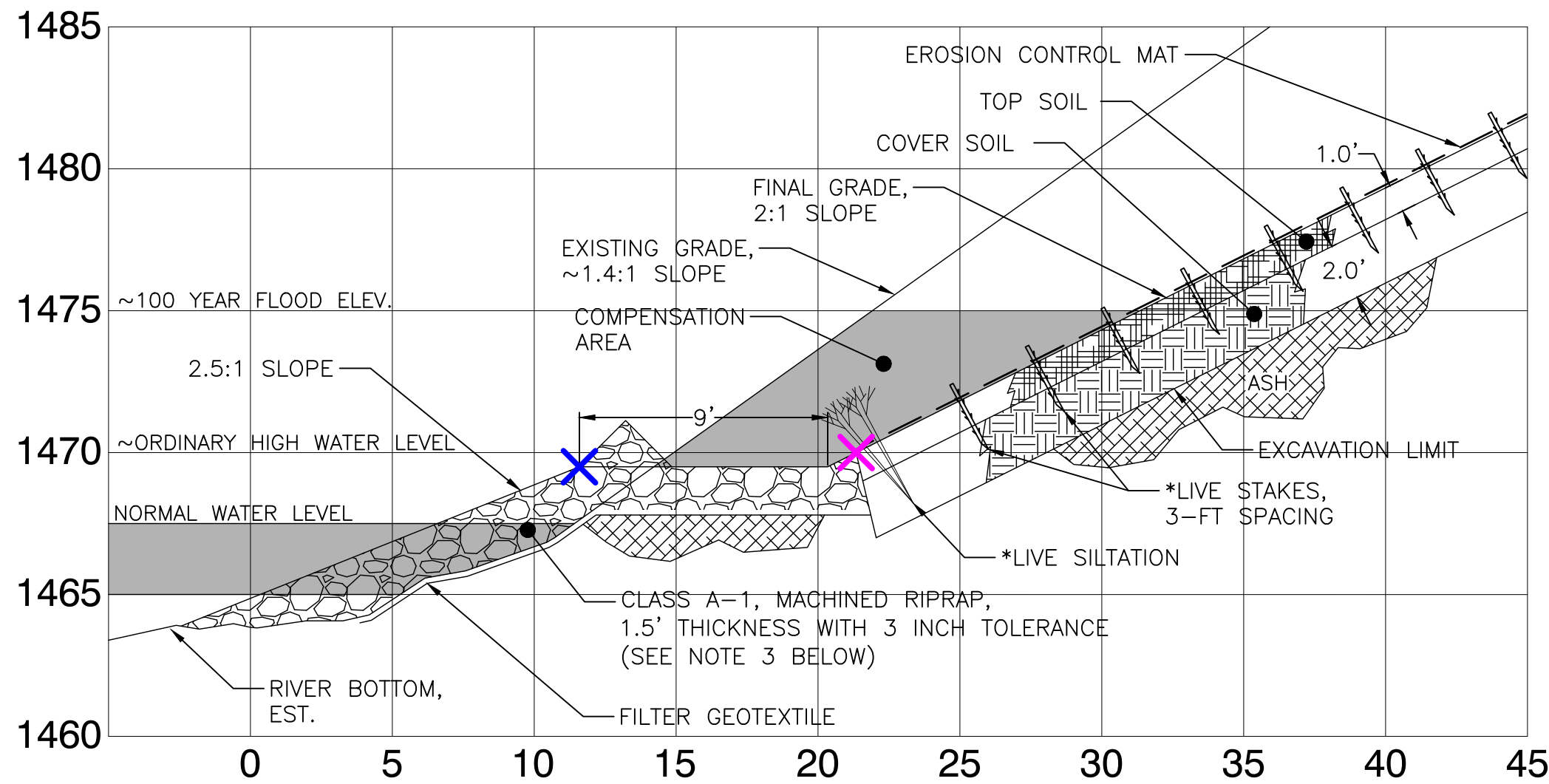
EPSC PLAN

C301

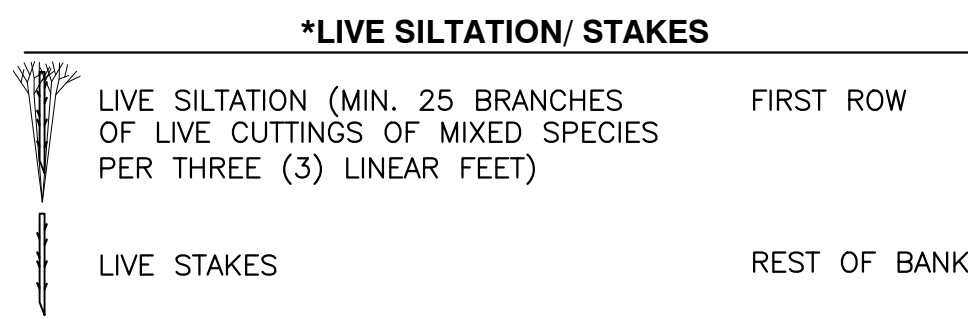
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1 TYPICAL LONGITUDINAL STONE TOE - WITH KEY
N.T.S.

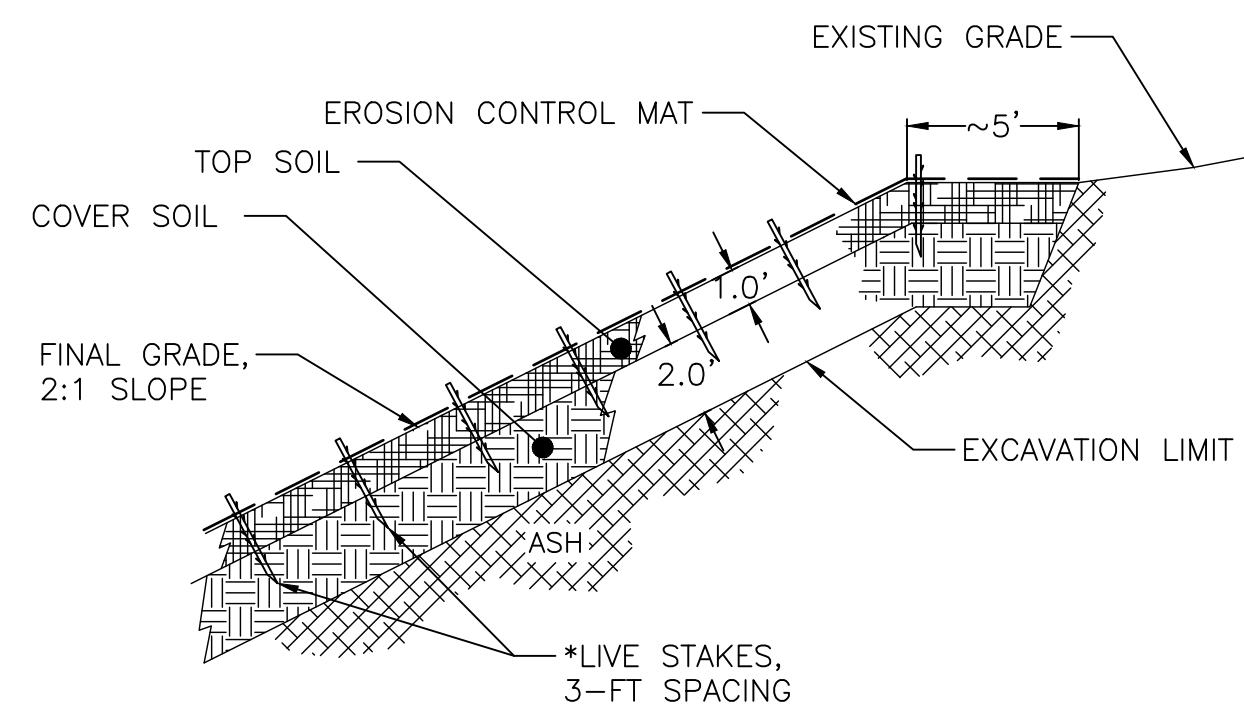


2 TYPICAL LONGITUDINAL STONE TOE - WITHOUT KEY
N.T.S.

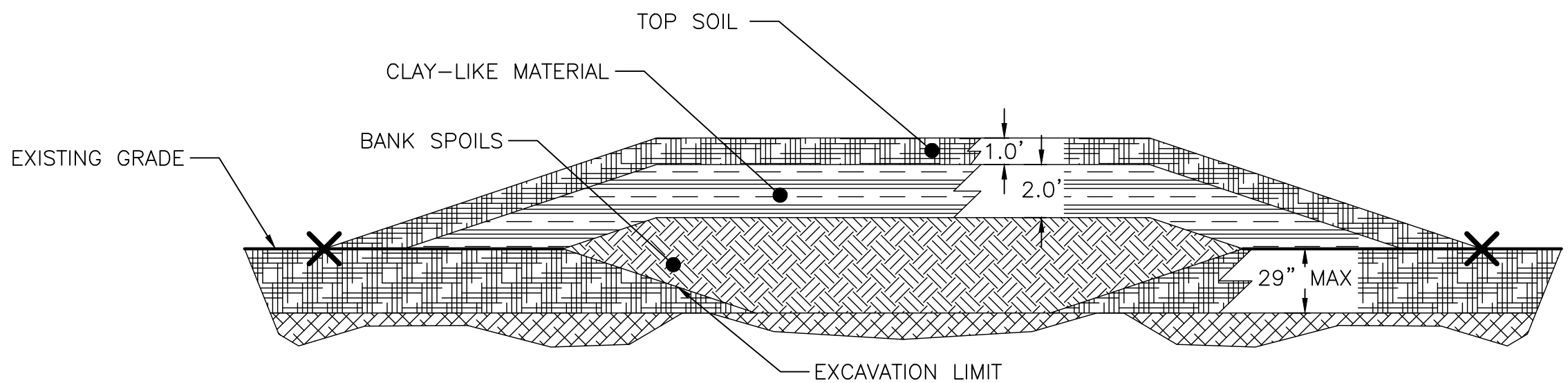


- NOTES:**
- KEY IN RIPRAP WHERE RIPRAP TOE IS ABOVE WATER LEVEL AT TIME OF EXCAVATION.
 - PLACE GEOTEXTILE AND RIPRAP ON THE SAME DAY AS EXCAVATION.
 - MACHINED RR, CLASS A-1, SEC. 709-02, 709-03-3a

- ✕ CONSTRUCTION POINT - TOE OF RIPRAP
- ✕ CONSTRUCTION POINT - TOE OF SLOPE
- ✕ CONSTRUCTION POINT - TOE OF STOCKPILE



3 TOP OF EXCAVATION SLOPE TIE-IN TO EXISTING GRADE
N.T.S.



4 STOCKPILE/OBSERVATION AREA
N.T.S.

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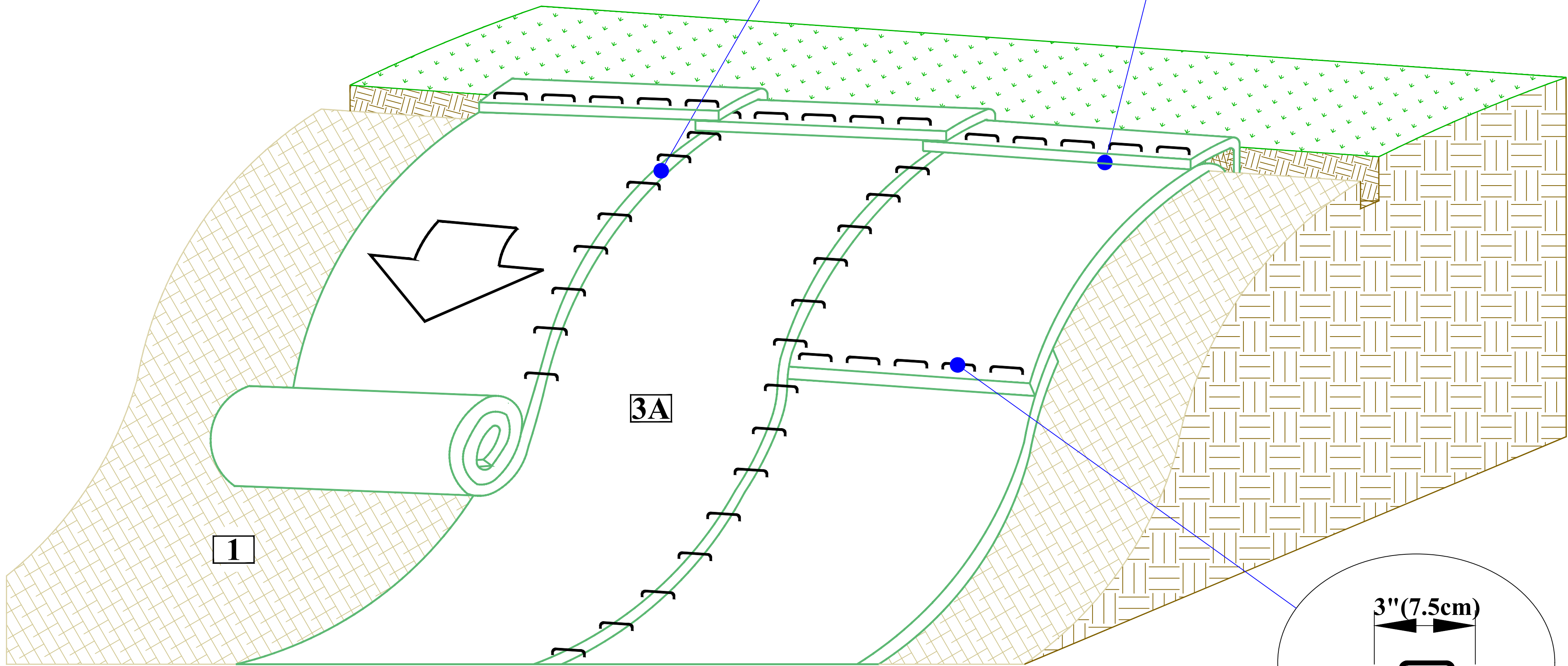
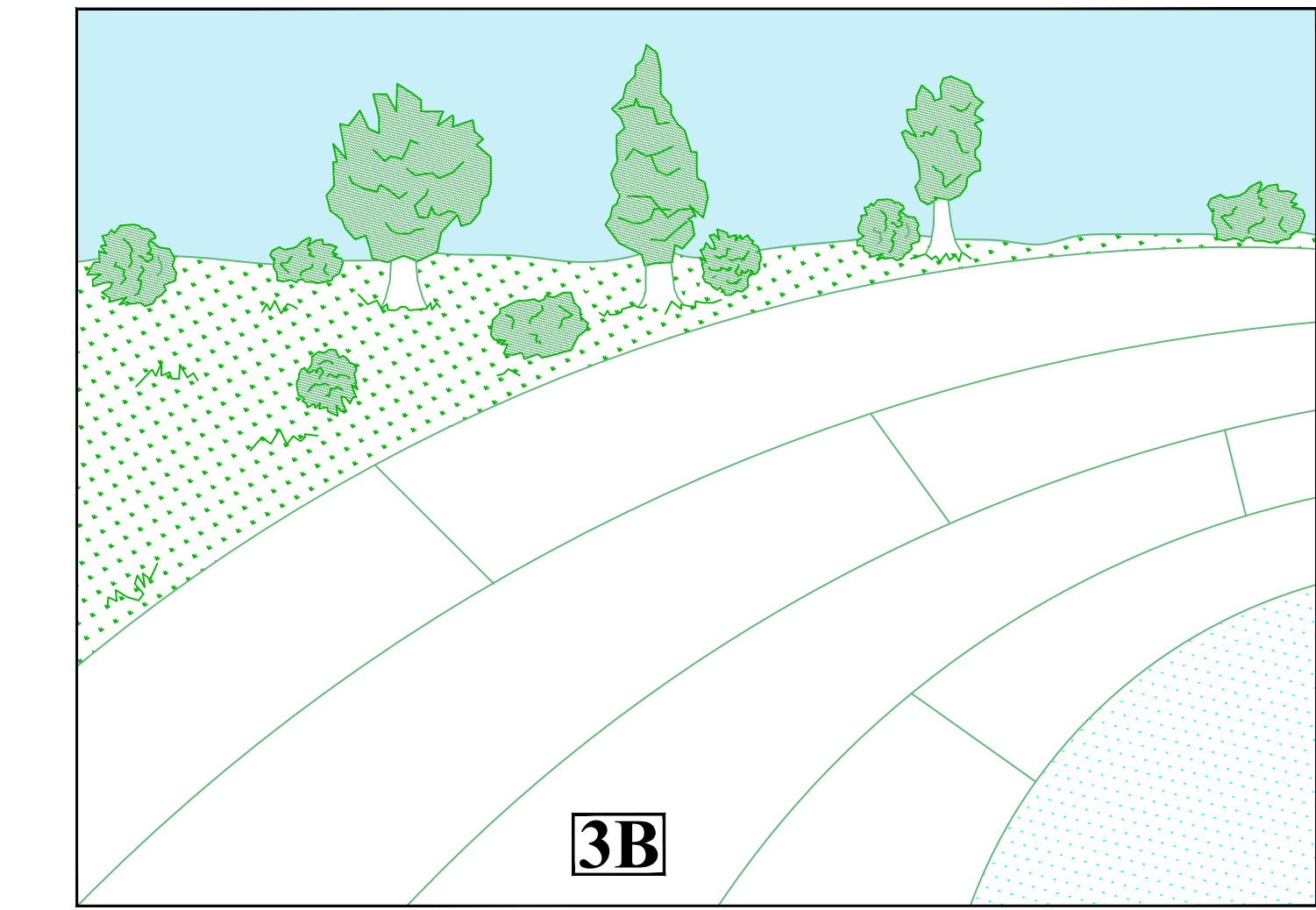
DETAILS

C600

LP: 2/26/2023 8:29 AM

LP: 2/26/2023 8:29 AM

LP: 2/26/2023 8:29 AM



5 EROSION CONTROL MAT (TYP.)
N.T.S.

ISSUED FOR CONSTRUCTION
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REVISION RECORD		
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SLOPE INSTALLATION DETAIL

1. Begin at the top of the slope by anchoring the ECM in a 6"(15cm) deep X 6"(15cm) wide trench with approximately 12" (30cm) of ECM extended beyond the up-slope portion of the trench. Anchor the ECM with a row of staples/stakes approximately 12" (30cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Fold the remaining 12"(30cm) portion of ECM back over the compacted soil. Secure ECM over compacted soil with a row of staples/stakes spaced approximately 12"(30cm) apart across the width of the ECM.
2. Roll the ECM (A) down or (B) horizontally across the slope. ECM will unroll with appropriate side against the soil surface. All ECMs must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide.
3. The edges of parallel ECMs must be stapled with approximately 2" - 5" (5-12.5cm) overlap depending on the ECM type.
4. Consecutive ECMs spliced down the slope must be end over end (Shingle style) with an approximate 3"(7.5cm) overlap. Staple through overlapped area, approximately 12"(30cm) apart across entire ECM width.
5. Apply live stakes to the bank per instructions on Drawing C601.

*NOTE:
In loose soil conditions, the use of staple or stake lengths greater than 6"(15cm) may be necessary to properly secure the ECM.



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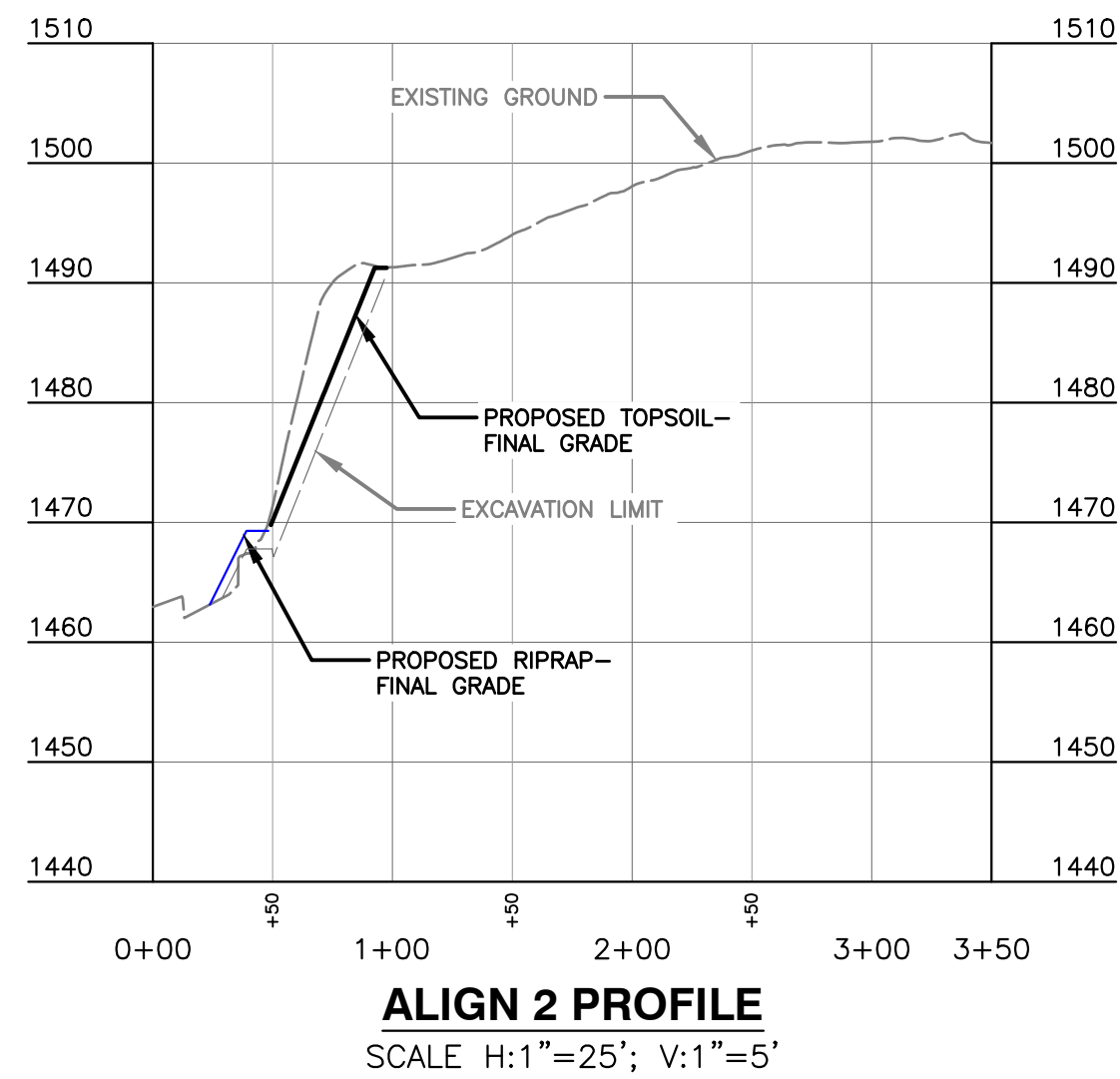
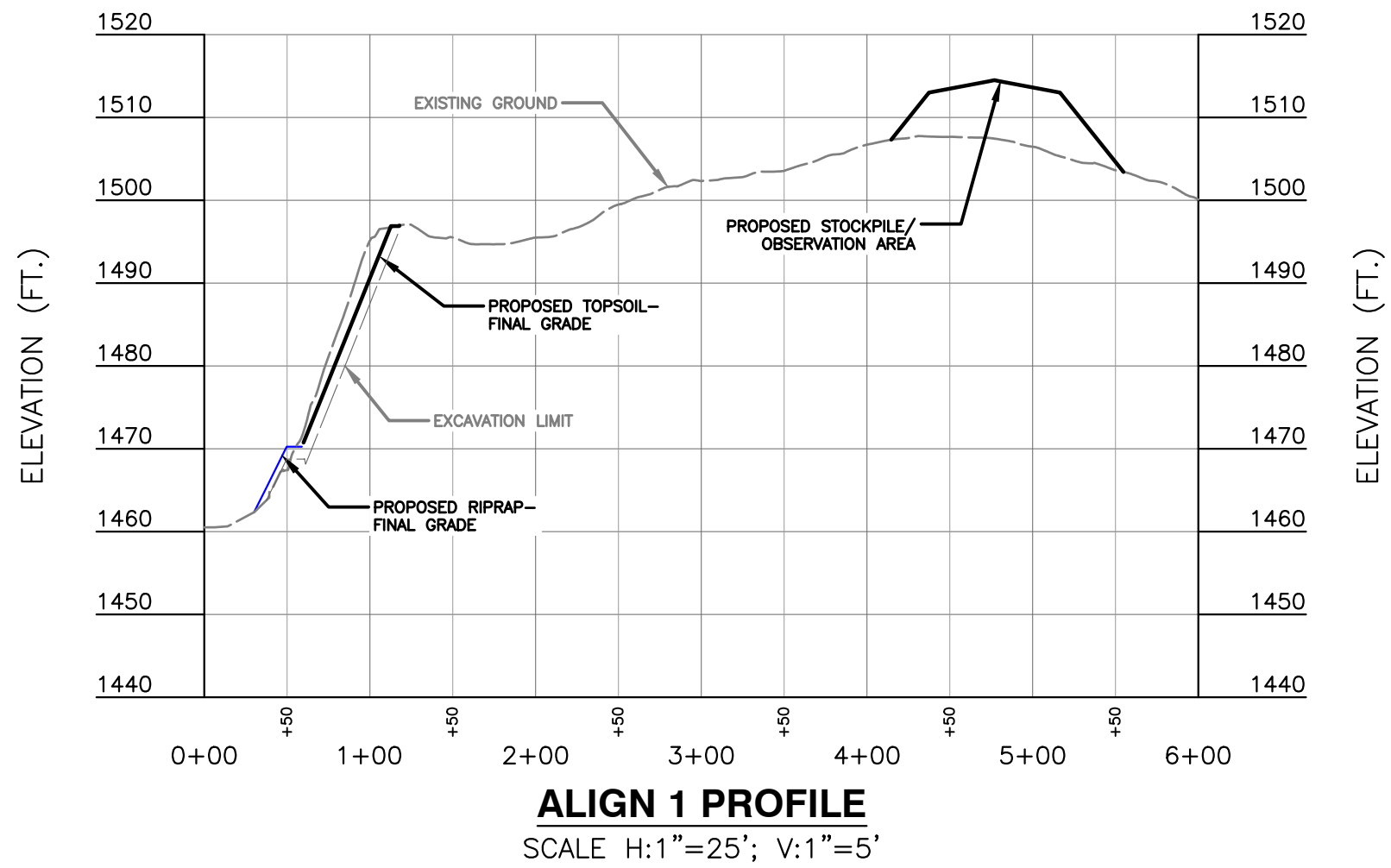
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DRAWN BY: CDS CHECKED BY: CEC APPROVED BY: DW
DATE: MARCH 2023 DWG SCALE: N.T.S. PROJECT NO: 305-671

DETAILS (3) C602

- LEGEND:**
- EXISTING PROPERTY LINE
 - EXISTING ADJACENT PROPERTY LINE
 - EXISTING EASEMENT
 - 1500 EXISTING INDEX CONTOUR
 - EXISTING INTERMEDIATE CONTOUR
 - EDGE OF WATER (AS OF AUGUST 23-24, 2021)
 - OH-W EXISTING OVERHEAD WIRE
 - EXISTING FENCE
 - EXISTING TREELINE
 - 1500 PROPOSED TOPSOIL/STOCKPILE INDEX CONTOUR
 - PROPOSED TOPSOIL/STOCKPILE INTERMEDIATE CONTOUR
 - 1500 PROPOSED RIPRAP INDEX CONTOUR
 - PROPOSED RIPRAP INTERMEDIATE CONTOUR
 - IRON PIN FOUND
 - AERIAL CONTROL POINT
 - GPS STATION
 - UTILITY POLE
 - GUY WIRE
 - POINT - TOE OF RIPRAP
 - POINT - TOE OF SLOPE
 - POINT - TOE OF STOCKPILE

REVISION RECORD		
NO	DATE	DESCRIPTION



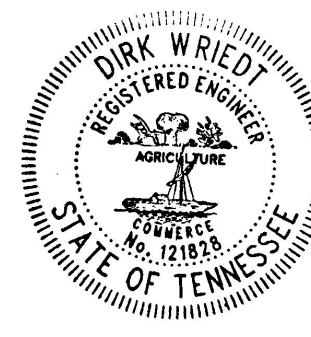
GENERAL NOTES:

1. THE TOE OF RIPRAP POINTS, TOE OF CUT SLOPE POINTS, AND 2:1 FINAL BANK SLOPE ARE THE KEY DESIGN PARAMETERS FOR THE BANK STABILIZATION PORTION OF THIS PROJECT.
2. THE TOE OF STOCKPILE POINTS AND 3:1 FINAL STOCKPILE SLOPE ARE THE KEY DESIGN PARAMETERS FOR THE STOCKPILE/OBSERVATION AREA PORTION OF THIS PROJECT.
3. CONTRACTOR IS TO FIELD VERIFY (WITH ENGINEER OF RECORD) ALL PROPOSED CONSTRUCTION POINTS AND ELEVATIONS PRIOR TO CONSTRUCTION BUT AFTER SITE STAKING HAS OCCURRED. IF ANY VARIANCES ARE NOTED BETWEEN PROPOSED POINTS/ELEVATIONS AND ACTUAL SITE CONDITIONS, CONTRACTOR IS TO NOTIFY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.

ISSUED FOR CONSTRUCTION

DATE: 03/01/23 BY: DW

SCALE IN FEET
0 80 160



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CONSTRUCTION POINTS

C700

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